Best Evidence Medical Education (BEME) Systematic Review: What impact do structured educational sessions to increase emotional intelligence have on medical students? Gemma Cherry, Ian Fletcher, Nigel Shaw and Helen O'Sullivan

Layman's Summary

Background and context:

Emotional Intelligence (EI) is a type of social intelligence It consists of the ability to manage your own and other's emotions in your day to day life, and to use this information to inform your thinking and behaviour. It is a characteristic, similar to other constructs such as reasoning, thinking and conscientiousness, which can be used to differentiate between individuals.

Research within medical education has suggested looking at doctors' EI to assess their levels of emotional competence when interacting with patients. Other research found a relationship between the EI of medical students, and patient satisfaction scores after their Objective Structured Clinical Examinations (OSCEs). It can be speculated that EI is related directly to interpersonal and communication skills, and is important in the assessment and training of medical undergraduates. It is therefore important to assess if EI can be improved by targeted, structured educational interventions, as medical students who have high EI may be better at responding to expressions of emotional distress by patients than those with lower EI.

We investigated this problem using a systematic review.The aim of the review was to focus on if medical students may be taught to improve their EI, using Best Evidence Medical Education (BEME) guidelines.

Review Methodology: An educational intervention was defined as a structured process intended to improve medical students' emotional intelligence or emotional development. Due

to the large amount of literature relating to this subject, some inclusion criteria were devised as a means of narrowing the focus of the review. The inclusion criteria were that the participants must be medical students, that the outcomes measured in studies must be related to their EI or emotional development, that the studies must not be general review articles or editorials, and that the studies must report interventions with content that is documentable and repeatable, and run over a defined time period. 14 relevant health and educational databases were searched electronically, using multiple search terms to ensure that all relevant material was captured. High yield journals and reference lists of included papers were hand searched. 2419 studies were retrieved, producing 1947 once de-duplicated. The abstract of each study was obtained, and looked at for relevance by 2 members of the team. Full-text papers were obtained for 36 studies, of which 15 studies were identified as fulfilling all inclusion criteria and were suitable for inclusion in review. Due to the variety in outcome measures reported, the studies were grouped by outcome according to Kirkpatrick's 1967 model of hierarchical outcomes at four levels. In order to assess the quality of the studies, a categorical method of assessment was used to incorporate both study design and quality of results. No study was excluded based solely on quality score, although this was considered in the analysis of studies. Relevant information was extracted from each paper by a member of the review team, using a tailored coding sheet.

Implications for practice: Following this systematic review, several conclusions for practice were found. Overall, educational interventions to improve EI in medical students have a small, positive effect on attitudes and knowledge. Outcomes measuring change in attitudes or knowledge (assessed using Kirkpatrick's hierarchy- levels 2a and 2b) are not applicable to real-life practice, and such self-report measures may overestimate the impact of the intervention. Assessments of changes in behaviour (assessed using Kirkpatrick's hierarchy- level 3) post-intervention show little to no improvement, and decreases in EI have been

reported. As assessment becomes more structured and applicable to real life, changes in EI become less. Care must therefore be taken in interpreting the results of educational interventions to assess EI.